Daenis, I november 29, 1957 Barro Colowolo MANN = Blue Daeus = cayana Mus species aas not been comprendes around the clearing on the island but there is at least one of in the reighbookood. It came once, with a bunch of of Cyanernes, to "rivit" the capture buriels. Didn't do much. Just rats grue au occasional Call-Note "Trit, and made a few weak WE and TE movements of the unal towages type This bird remed to be definitely, but Cooled, unount 1 & ed with the flock of of Guvernes, it unally flow around wette them, but not by any means always. ande from this incident, I have one recuttre of Dann 11 & becolve by itself lugh in the tree-tops Deenis I Descuber 22, 1957 Dano Colorado ANNIN = Scarlet-thighed Davis = recuesta a of of the spenies, in full plumage, came and "visited" the levels in the away their reoning. Just rat, with lots of TF, nowe WF, and uttered Cots of "Trit notes (quite louds perhaps less so than those of the Green Honeyneeper). They flew off relevitts. 9.8. the circumstan ces of there "Trit hotes were quite recurriscent of these of the

(a) Dains, Dec. 22, 1957, I. green Houey ceeper - rather like alann notes. Daeuis I December 25, 1957 The Chaques I watched some of their breids in the tree-tops along the ower, near the trans-isthmian highway; and I noted that they recued to move as a flock (probably nicled mg 4 or 5 lurdo). also probably lovely amoriated with a 11 place of Flari Tanageres! Barro Colorado Daurs, I I have seen quite a few of worth speces around here Single males, or (in the case of the Bleve Damis) pairs. Very reitters, neuer stagnes mone tree for very long, and never Mowing duy duplay of any nort. Often in trees with Plain Janagers and anouated years, but never really integrated u fleche - of at least, often leave before the tawagers do Daerus I January 31, 1959 Buro Coloredo I raw 3 Blue Daemi (I adult of mother of probably mun ature, and 19) anouating with one another today The largest Hock I have new rafar When fruit watered, they were reiting and presun

Dæuus, Dan 31, 1958, I I in the rame tree as a flock of the Honeynespers Curbo were cloudy the remething). But the livrels eventually moved an and began to I fred and the 2 years remod to regregate completely Davies, I February 4, 1958 Band Coloude I have near reveral more fearlet-thigles from time to true (unduding this morning), always in pairs apparently, generally very reminiscent of Blue Honey weepers in feeding a Jeging movewents (and their TF's and WF's never to be identical), but they absolutely do not anounte with any of the Housevergers ( extre Olee Daeus as far as I have recujutall, also wateling an apparent rugle of Blue Daeurs this evering. Alternes rugle CN's rejectedly at a few record willians The porture from which she gave there CN's was approxumately as Tail deglith but definitely Convered with cach note, welther raved back to previous poution pay too much allention to the flug Clark night, all the lunds neen to be more fluffed than usual). The CN's theurelues could certainly be treus cubed as "Init", as I have done before; and they are unlawly remunicient of the CN's of the Green Honey weaper (if definitely weak er) frut they also have a very faint trace of the "bushy" quality of the Blue House weeper & HCN's Calthough I do not think that

Dainis, Feb. 4, 1958, II they are iteratty leomologous with the Blue Honey reapers HCN's more Cilies its ordinary CN s). The circumstances in which there notes entre grown mere not awfully clear. When I frist now the hurd, a nearly group of Blue House weepers were uttering a lot of HCN's, and the pacus almost recued to be duelting with the House respers, but it continued its notes after the Honey weepens bad thut up. Hus ludded not reen to be alarmed or hertele to any appreciable extent, so there notes did not reen to function exactly like the Frit Hotes of the Green House neapers. I nother mondered, in fait, if this queue not trying to "call in " her of ? Jelinay 24, 1958 Dacuis, I

Duro Colorado

a ringle of fearlet-thigh came to the clead tree by Chap. man House this afternoon and gave a lot of notes, appaiently rowe rout of CN's. Writtout any returalzed poetwas or morewents. The notes themselves were longer than an Dremember bearing from Danners before, almost buyllable Usually more or less like Tree-cee", pullaps rometimes lelle "Trece-you" - Rutter plaintine. Men mere pellaps most remuseut of some of the plaintine CN's of the Through towagers - the ones that I think an used to "call in "the wate. aughow they produced no response in the care of this scarlet things and be eventually flew off and disappeared.

Damis, I. March 7, 19585 Barro Colerado Looked up with a tree-top to find what reened to be a dupute ni progress l'etureir 2 07 Blue Dacuis. The 2 hulls mere fletting dround from twing to twing, parturing brufe between flits. It was very noticeable that they didn't do are fluturing of any brush cluring this performance!! The portions between flits were a form of st Thouar les conneça Your conglet a buy glupre of this serformance, but 9 couldre toleteet any sound or any fluffing or sufflues, (there was certainly no affulf of any roit). It was going into the ft alnoticeable that a hud oppouents 1.e. Mounis of the warp tended to face its black throat, as in the of fring Horier weeper. It was new unpremou that the bend thuled to go into the It with a comparative graped & vigorous movement. so that the whole their almost looked like a found Head-ton ung. Could this pourly be related to the "Certifien of the Swallow-tanager desculted by Schaefer 2777 June 22, 1958, Daewis I Bano Colorado Watetung a desprete, apparently between a of Blue Dames (with his q returning reachely nearly) and a of Green Housey weeper 11 The of Dames repertedly alternated a St Portue, Celie the one

Danis, June 22, 1958, I with a low forward porture (F), Hus altern ation deverence was new rapid, rigid, and ed ratter lele retualized as nuch. Looks 2 variable boura retualegal form of the more me of of Blue Honey recepes during rome disputes. The whole their apprecents quite ribert. They the ands all flew away quite moldenly, april 26, 1960 Danis, I Baue Colorado I Cought a javi of Blue Danneses (109 a 19) in the market Gyesterday. I now have there in a 3-foot cage, by themselves, in the Laurinal Curuse. They appear to be inquite good health the of has Cost I hus tall but is very rigorous. The quis in nearly perfect plumage but now entat les vigorono. Quete tanie One or both bould foundly ould the of) utter single "Int" (N's Is from time to time. Quite rost and weak - sounding. Not at all hars has bearse or metables. Not accompanied by any spend relualized sorter es or neovements. Ot down this monning the of uttered 3 reparate, suigle, pleraus I wantling rong. Very juin blad and difficult to bear clearly attrough not really very rost. The Cart jant of each phrase received to be a doublet. Perhaps something like "Tree-weer. This pomble that the rest of the phrases were also doublets, although less dutient. Probab ly something lebu is or 7 notes in each plurase as far as I could toll, none of these rouge were accompanied by nitualized porteres or wovement

Danis, apr. 26, 1960, II. (7) Hus of news to be wicompletel adult plumage. His ulterance of workling vong is therefore nather varquening. In this years wor "grantive" than Eganorges - Chlorophanes? I shouldn't be unquesed if the Turned out to be another comp. I aratively strong hostile years I notice that the of and q always or alwart always feed reparately. The of uneally goes down to the food. duch a eats, while the of removerus upon a perile. They, when the of leas Sunshed and leaves the food derly the q goes down and eats. The of has spect a lot of time hopping or "exercis" up and down The wore-vetting rides of less cage, apparently Cooling for unette Hus Ly mues may be more of a "creeper" their the other tausger-house respects April 217, 1960. Daires, I. Ballo Colocado I wateled un captive pair & Blee Damises Culiula I shall ca. le pair A. ) this morning in their mall reparate cary. Welting at cell interesting. So their 9 put their down in a large outside cage, 30 ft Love, with 3 of and 3 q Red-leggel Que Hourgreepers. When there A Dannes were put in the new cage, they provoke La Cettle Contille from the House seepers ( ne today a notes on Granerges) Both the Favolthe & Dacues were supplanted, reveral trues, by one or I more of the of House neepers. Herther Deenes officed the rightest resentance e or displayed in any way when replanted, their wellt rugget that of the House ceeper is the dominant years - a point of rome interest in connection with the integration of neixed flores. Both Daennes began to weep up a down the trules and beauters 5 of beales almost as noon as they were put intheir wew cage, and their

Danies, algu 27, 1960, II. (8) C started to weep along the rides or roof of the lage ( there are a lot of dead leaves on top of the case). Overill Cooling for wieds, It is now fairly obvious why the sames are not as often auxinited with runch flocks around BCI as one nuglet expect. Then feeding habits are quite des twileve. They must compete new little with the other lovel bones wegens The most interesting realteres of the A Civids today in their new case were revered greeting warreling some legthe of at Ceast 3 times the of uttered a greeting nous when he rejound the & after being repair ted from leer (at least neveral yands œurer). All their rouge were obvious. by variouts of the warleling roug I heard yesterday. The roug I heard most clearly today was uttered by the of when he landed bende the q oft en bewig supplanted an a House respect This roug countled of 3 identice -Aught be transculed as: "I sub-toit - toewew. I sub-toit - toewe w. Isuh-tsit-tseewew. (The wew of the "tseewew notes was moderately long. Might be better transculed as "woooo y cycept that it had a definite ew sound.) The other rows were uttered I when the of joined the q without having been involved in hosteliles bef ordrand. All similar but probably not identical to the roughauscubal immediatel above. All the roses were moderately loud, Lefuntely not whisper nouses (we also today a moles on Gameryes) as far as I could tell there rouge were not accompanied by any special introlled portures or movements and the quade no apparent & response of any rost.

Davis, I March 12, 1941 Bauo Colorado The guer A livids deed a Constinue ago. allout a month ago. of get a pair of adult livids, or of and an apparent juvenile male, in Co process of moulting from prevend to adult plunage (I think his moult I may be delayed, because he has been in capturets for nome time, but he ( must be at least fairly young). The adult of exaged someliow. So I I were Ceft with the advet of and the young of. I shall call their livids "B of and Bot. I have heart them reparate, one in each ride of a long. Lage (unde the anuval house), Separated from one another luga partition The morning I removed the partition, and let the a beids together for about an how Menreparated their again When I fruit let the 2 livids together, they were very exceted. Slying back and forth new rapidly. Attorning lots of migle CN's. Fots of Hilling movements. Fots of "Song! Fots of BW. Lots of Bowing! Lats of St Portures williand Bowing. Lowe figliture. Both auds utleved lots of CN's as they flew around the cage Sometimes repeated very rapidly but never ancherited into a trill or rattles or organized into any more complex recalization. All there CN's recured to be exectable "Isit's. Quite loud & hard. Could rowetimes a little like Treet. as gar as I could tell, the widividual CN's uttered during this encounter more eventually the same as those ultered by broth winds earlies when they moved about their cages when they were itell uparated. But neither wind over attered as man, CN's as rapidly when alone. as Jeras I can tell, the CA's of a and of Choth juvenile a adult) Oslere Dannes are all the sure in sound. Some of the CV's were ultered during It Portwees auston Bowing

Itters auguspaceed by Hacking but no other situalized movements or port & weer. Still others not accompanied by any retucilized portures or movements The of uttored long phrases were frequently whenever he cause near to the q or the g came near to buis. Extremely variable. Prob all usually rometting like "That took treeswood treeswood or "Trit toit toeewood woodoo The frist couple of notes of each phras e probably probably oul little-modified CN's. (Vertraps not modefied at all in nome cases.) Sometimes a picliminary "Frit "replaced by nometh me more lette "Isee! Sometimes Ditime, one or both of the longer notes at the end of a phrase was "tooweeee" ustead of "toeewooo, Some of I the wood nounds ( willuding the "wood s in "treewood is) were quite harsh and howerse-rounding. Sometimes the rong phrases were utt L'éved ringly, formétimes répeated rapielle oure of (?) twice. Partial rép etitions and incomplete phenases were also very common. Most rong phen ares and partial rong phrases "embedded" in a men of CN's. The Tappeared to utter there forego when he was Bouring, when

he was in an It Partwei without Bowing, and when he was not in any utualized porture. Umally accompanied by Hirling movements. but the of performed Herling movements almost continuously when he was not

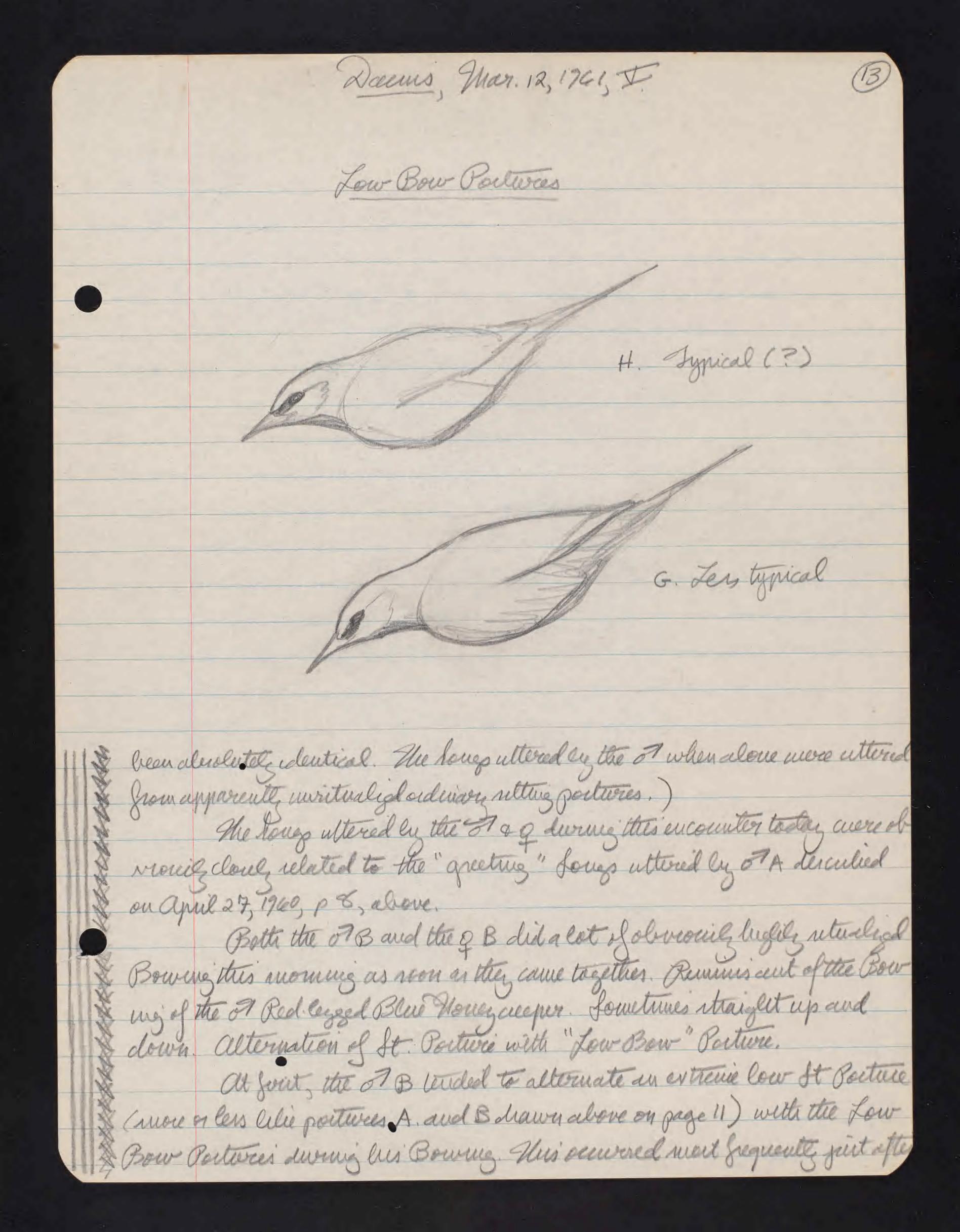
suigrieg as well as when he was suigring.

ares, accompanied by the same variety of portures and moments, as the Award this incounter this morning, but the certainly uttered rone, pattories much less frequently than the of

Che Bot wed to utter song plurases quite frequently while he was by huntilf alone. But he has not done so for a couple of weels. I think the Song he uttered by hunself alone were more or less similar to the our he uttered during the encounter today. Cut they may not have

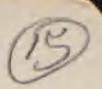
Daeuis, Mar. 12, 1961, III St Portures I A. Extreme Com B. Extreme Cour c. Weak D. Extreme low forward

Daemis, Mar. 13 1965 II. St. Portures II. E. High + wwg-droop F. High G. Diagonal



Dacues, Mar. 12, 1961, II (74) the Fand of Svirt come together, when they were most active. Such Fow It Post & was may be an indication of augh interests Later ou, when the Civids were less active, and the internity of the en counter appeared to be declining, the of armined en time Low It Port weer relatively len gregweath during an Bowing are Brewed What It " Port Le vies (mon en lers letre C. ou p. 11) relatively mon frequently during lus Me qB did nather less extrevie Bowing, and Cers Bowing in general, throughout this encounter. I don't hnow if she ever assumed a negertience Low It o'culture during her Bowing at any time. He diel, however, friquer the arrive Weak It Portwies diving Bowing. I thuile that the Bowing of both of and q B was unally accompa medly song phrases; but I am not quite mure about this. Centainly some trues whent and a allowpawed by CN's untead of Lougs. a lot of the Bowing of both & and & B was also combined with Evotives. Quite extreme. Quite Che the Pivoting of mannibus. It was my unpermon that the of lended to do a lot of theight up and down bow me, with little or no Pivoting, during the very first few recouls afteren & countering the of for the first time. But he began doing a lot of extreme L'outurg very room afterwards, while the levids were still showing a lot of apparent high intensity believes. I that mod of the sideways movement during swoting during Bowing was on the down beat. Or, at least, this is the impremion I got. Is it soulle? I think that the of tended to do nather less, and less extreme, Bir oting than the of on the average Both livids did a lot of BW this monning, equally at first when they reened to be most exuted. It is possible that the down mon

Danis, Mar. 12, 1961, III.



1 sevents during Bouring Cegrenally Bowing & Protury) are intention move wents of BW, or have been derived from intention movements of BW Fail-fleding was particularly compicuous during some Proting. Sometimes, at Ceart D-V, with ou extreme houseutal component. Encutrally a continueration of the body Both Fland & B sometimes assumed St. Portiones without any Sownward Bourse movements. Espenally toward the end of the encounter this morning. Their of there It's probably low interesty Unially more or les Weale St Partieres (lelie Coup. 91) Urualle utent, 9 think. Several times, when the of came particularly close to the of he arrived a very thigh It ( like E or F or g. 12). also relevit. The ques much more aggrennie than the of this morning; and it was my un premion that there were bugh St's may have contained a relatively wary strong excepte I there that the Diagonal It's (Gp. 12), which were occasion ally assented by broth of and of may be nothing more than variants of the ordinary Weak It (C. p. 11) But it was also my imprecion that the q truded to assure ruch Diagonal It's relatively much more frequently The of actually cettached the of al Ceast 3 times this morning. But the did not continue to gurme the of releuteurly after attachings in the way that I have seen some of Green Housequeepers Lo. I think that all arrest of her attacks upon the Twee immediately preceded by Long ghraces by our of both wids. It is obvious that all or alwort all the deplay patterns of both of and & B this morning were large or completely hortite. Ruffling and fluffing patternis were not conspicuous during the

Danus, Mar. 12, 1761, VIII. (16) encounter between the B's this morning. Both livids tended to have the bee ast and belle feathers ingette to moderately flaffed much of the time but I I was mable to determine if this fluffing was returned or not. Every once in a while our of the lurids would ruffle or fluff the I black back feathers a little. But again I was mulle to determine if this w as rignificant. I was quite abreut this monning. Ong twice ded the of droop I hus weres appreciably. Both tures in lugle St. Porture. The abreve of B Is m'nuch rituations is a remarkable difference from the behavior of Cyaneryres Dainis, I March 13, 1961 Bano Colorado I hept the B livids apart today, but matetied them from time to I time cluring the morning. o Buttered one song this morning healt after dawn, quit after he walle up. In a perfectly invictualized sitting parture, This fong was more or les alie the Lougs I heard yesterday; everyt that it began with a long revuer of at least 8 rather CAV-leve notes. There CAV-leve notes appeared to be more or len defentely organized into doublets, More or len conne ga: 3ee-3ee 3ee-3ee 3ee-3ee .... Then be not in a very fluffed portiere tree drawing on next gage) and attered lots of suigle ordinary- rounding CN's. "Trit. ... Trit. .. . Int. ... Quete loud (probably regulty louder than all or most foregr) and rapid. I noticed that the vell opened, widely and closed with early note. Menthe of uttered another song plurare, while he continued to sit in the same were fluffed poetere. Hus phrase muglet pombly be transcrip

Danis, Mar. 13, 1961, IF, bed by rowelthing like "Int ta-sa ta-sa whoook whooo I luffed porture accompanying CN's and foug Phrases. Certainly not usually) more diagonal. Then be uttered reveral mon roug sterases. Again included lots of 11 3 300 300 motes I have now come to the conclusion that the base four of all or most com plete rough of this species is a series of CN-like doublets followed by one or two hourser & harsher "Whooo " hotes. It is easy to unagrice how the CN a HCN putterns of the Red legged Blue House respect could have been derived from a long of this type. Fatte this morning, around 10:00 am, I was urquied to hear the & B atterws lots of Sous suraces all le herself (the or was quiet through out the period the of sang). She uttered there rougs as she sat and also wh on the moved about her cage in a serfully ordinary way. There was never ary trace of any retualized poeteres or movements (except occasional, not ver extreme Heching) at an time during the period the rang. As far as I could tell her bell was kept completely closed throughout all her songs. Her rougs were entiewed variable. Most of them varied between sometime like "Bee zee zee zee ta-whee-you ta-whee-you and rouelting like "Zee zee zee Wheeooo! all her ringing was really qu

Deenus, Mar. 13, 1961, II (8) Il te rewordeald reminiscent of Palm and Blue Famogers! Danis, I. March 22, 1961 Barro Colorado I let the B brids together again this evening, whoilly lufore sewet. They reacted in much the same way as on March 12, but much Both livids vegun Bowing, and ultering CN's and fought immediately. But their they quieted down fairly rapidly.

Some of the Sones were nothing more them " That to owce".

Remarks alow interests but complete vernoù of foug. I don't huow if there is any motivational or functional desperance between Joveps eveling. in Trootiee and fores encluis in "I received. Ourible the latter are I more rhouse hortile. "Wood rounds rometimes have an HAC-like Most of the Bowing couristed of alternate poetures course ga. Lowe of the Bowing and Sovers were certainly completely much rounged! There was one buil but vigorous contret figlet, in the air between the a berids whoithafter they came together. Almost completely silent. No HAC. Oul a few mugle, quite ordinare sounding CN's Mus' would vidicate that rowe or all of the CN's areat least party host